

#### DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

November 21, 2002

McKenna Water District Attn Jim Davis PO Box 143 McKenna WA 98558

Dear Mr. Davis:

Re:

Water Right Permit No. G2-27829

In compliance with your request, you are hereby granted an extension of time until November 1, 2007, to put the water to full beneficial use and file a notice of such action under the above mentioned permit.

Please submit the following when the actual water has been put to full beneficial use:

- ° Proof of Appropriation form filled out and notarized
- ° \$20.00 check payable to the Pierce County Auditor's Office
- ° \$5.00 check payable to the Department of Ecology

Please send both checks to the Department of Ecology and we will forward the Auditor check along with your Certificate to the County Auditor's Office for recording. Also, the County Auditor is requiring that we have the parcel number for your property added to your Certificate. Please provide the parcel number for the point of withdrawal/diversion and the place of use.

If you do not expect to have the water put to full beneficial use by **November 1, 2007**, you should request further extensions, as needed. To request additional extensions, you will need to submit a letter explaining why an extension is needed, including how many more connections are proposed on this water system. You may extend for more than one year at a time at a rate of \$5.00 per year.

This order may be appealed. Your appeal must be filed with the Pollution Control Hearings Board, PO Box 40903, Olympia, WA 98504-0903 within thirty (30) days of the date this Order was mailed by the Department of Ecology. At the same time a copy of your appeal must be sent to the Department of Ecology, c/o Water Resources Appeal Coordinator, PO Box 47600, Olympia, WA 98504-7600. Your appeal alone will not stay the effectiveness of this order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Chapter 43.21B RCW.

If you have any questions or concerns about any of this information, please call Sheri Carroll at (360) 407-0240 or Teresa Hanson at (360) 407-0270.

® व्यक्तिक्षेत्र १८

Sincerely.

. Mike Harris

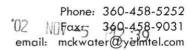
Water Resources Supervisor

JMH:th (paextension.doc)

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## McKenna Waler District







Board of Commissioners

William Hopkins Georgina Miller Calvin Weamer

General Manager James M. Davis October 31, 2002

State of Washington Attn: Jill Walsh Dept of Ecology PO Box 47775 Olympia, WA 98504-7775

RE: Extension of Water Rights Permit G2-27829

Dear Jill:

Per our phone conversation last week McKenna Water District is requesting a five (5) year extension. Our current permit authorizes withdrawal of 168.6 acre-feet per year, which is 54,905,725 gallons per year.

The District's maximum capacity per the Department of Health is 323 service connections (ERU- equivalent residential use). As of this date we have not reached capacity. A rough estimate of gallons pumped from July/August 2001 through July/August 2002 is 50,362,399 gallons. More comprehensive information is available if needed.

Enclosed please find a check in the amount of \$25.00 (\$5.00/year) per your letter dated April 6, 2000. Please feel free to contact me if you have any questions or concerns. You can reach me by cell phone during the day at 253-307-0644.

Sincerely,

Jim Davis, District Manager MCKENNA WATER DISTRICT

PO Box 143 McKenna, Washington 98558-0143 11/15/02 OKay to extend the P.A. date to 11/1/2007 Walsh 5

## Vandeberg Johnson & Gandara

A PARTNERSHIP OF PROFESSIONAL SERVICE CORPORATIONS

KATE M. ADAMS
DARREL B. ADDINGTON
JOHN H. BINNS, JR.
KERRY E. BRINK
LUCY R. CLIFTHORNE
WILLIAM A. COATS
GEORGE T. COWAN
H. FRANK CRAWFORD
MARK DIETZLER
NELI T. ESPE
DANIEL GANDARA
KINNE F. HAWES
JOHN A. HOLMES
MARK A. HOOD
JAMES A. KRUEGER

TACOMA
1201 PACIFIC AVENUE, SUITE 1900
P.O. BOX 1315
TACOMA, WASHINGTON 98401-1315
FACSIMILE (253) 383-6377
(253) 383-3791

SEATTLE
ONE UNION SQUARE, SUITE 2424
600 UNIVERSITY STREET 4
SEATTLE, WASHINGTON 98101-1192
FACSIMILE (206) 464-0484
(206) 464-0404

P12:42

DANIEL C. MONTOPOLI JOHN L. NICHOLS MARK R. PATTERSON H. ANDREW SALLER, JR. G. PERRIN WALKER

DIRK A. BARTRAM
CHARLES R. BUSH
NANCY THYGESEN DAY
JAMES C. FOWLER
HAROLD T. HARTINGER
DANFERD W. HENKE
W. ROGER JOHNSON
ELVIN J. VANDEBERG
OF COUNSEL

REPLY TO TACOMA OFFICE

November 1, 2002

Ms. Jill Walsh Water Resources Program Southwest Regional Office Washington State Department of Ecology P. O. Box 47775 Olympia, WA 98504-7775

Re:

Water Right Permit G2-27829

Dear Ms. Walsh:

Pursuant to our telephone conversation yesterday, I am hereby requesting to receive notice of any Department actions affecting Water Right Permit G2-27829 (currently held by the McKenna Water District. Specifically, I would like notification on any extensions requested or granted relating to that Permit. In addition, I wanted to provide the Department of Ecology notice regarding the pending lawsuit under Pierce County cause number 02-2-04241-0. In brief, the suit is based on the following:

The well site for the Water Rights Permit at issue is located on property in White Water Estates known as "Tract 'A". Ownership of Tract "A" is contested. We believe that the 1990 recording of the White Water Estates plat provides an interest to its lot owners which is senior to a 1992 deed purporting to convey the well site to McKenna Water District. These senior interest holders did not sign onto the Permit as owners of the well site land.

In addition, these senior interest holders did not sign onto the Permit as owners of the land to be benefited by use of the requested water (lots in White Water Estates). The permit was initially obtained, by joint efforts of the Satellite Water Systems and the Baydo Land Company. Baydo subsequently transferred (sold) the land, but did not transfer a portion of rights in the permit to the landowners, nor obtain a release of any sort.

White Water lot owners are seeking to protect and obtain their rights in the well site, their rights in the Permit, and ultimately, seek to individual water rights certificates reflecting that portion of the obtained water rights that are used to benefit their land. Many of the lot owners either currently have, or wish to install, private wells to serve all or part of their water needs.



Ms. Jill Walsh November 1, 2002 Page 2

The parties are currently attempting to settle the case, but in the event it proceeds to trial, it may be another year before the parties' rights are conclusively determined.

I appreciate your time in speaking with me yesterday, and thank you for your offer to forward this information to appropriate Department personnel. Please feel free to call me on this matter if additional information is desired.

Very truly yours.

KATE M. ADAMS

KMA:KMA

Cc: client

G. P. Walker





P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

February 15, 2000

McKenna Water District PO Box 143 McKenna WA 98558-0143

Dear Sir or Madame:

RE: Water Permit No. G2-27829

We have received your Notice of Completion of Construction associated with the abovenumbered permit.

Enclosed is a Proof of Appropriation form, which is to be filed when the water has been put to full beneficial use. Full beneficial use means that water is being used in agreement with the terms of the permit. You may complete and file the Proof of Appropriation form for less water than authorized in the permit, if the project is complete and less water is being used than anticipated.

If you cannot put the water to full beneficial use by November 1, 2002, please contact the Department of Ecology. Permit cancellation may result for failing to timely file the Proof of Appropriation form.

The fees for filing and recording your Water Right Certificate are \$5.00 payable to the Department of Ecology and \$9.00 payable to the Pierce County Auditor. Send the Proof of Appropriation form and both checks to the Department of Ecology. Also, the County Auditor is requiring that we have the parcel number for the point of diversion/withdrawal and the place of use, added to your certificate. Do not submit your fees and paperwork until you have put the water to full beneficial use.

If you have any questions or concerns on the above information or any other aspect of your water right permit, please call the Department of Ecology at (360) 407-0240. Thank you for your attention to this matter.

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Sincerely,
Sheri Carrael

Sheri Carroll Water Resources

SC:th (ccokpa.doc)

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Relinguish 6225434

Relinguish Claim 2896

access port Weel 4



#### DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

April 6, 2000

James Davis McKenna Water District PO Box 143 McKenna, WA 98558-0143

Dear Mr. Davis:

Re: Water Right Permit G2-27829

As we discuss on the phone the other day, I am returning the *Proof of Appropriation* form that you submitted to the Department of Ecology. I suspect that you are not done developing this water right, ant this form should be filed only when you have developed the full quantities of water described by your permit.

Your permit authorizes the withdrawal of 168.5 acre-feet per year, which is 54,905,725 gallons per year. The permit currently grants McKenna Water until November 1, 2002 to demonstrate that this water has been put to use. If you need additional time, you can request an extension. It will be also important for you to have meter readings available so that you can use to demonstrate how much water you actually are using.

I'm sending you a blank *Proof of Appropriation* form so that when the time comes you'll have it available – consider the first one practice, your check to the Pierce County Auditor, and a copy of the letter we sent to you with the important parts highlighted.

2010

Please call me at (360) 407-0274 if you have any questions.

Sincerely,

Walsh

Water Resources Program Southwest Regional Office

JW:th

S



## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

#### **CONSTRUCTION NOTICE**

RECEIVED

'00 FEB -7 A10:58

☐ BEGINNING OF CONSTRUCTION☐ COMPLETION OF CONSTRUCTION

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	9 9		
			#G2-27829
NAME		SURFACE WATER PERMIT NO.	GROUND WATER PERMIT NO.
McKenna W	Water District		# <del>G2-25435</del>
DATE CONSTRUCTION BEGAN	2	DATE CONSTRUCTION COMPLET	DATE COMPLETION EXPECTED
ja 67 s		August 1, 19	99
IF C	ONSTRUCTION NOT COMPLET		
% EQUIPMENT IN PLACE	% MATERIAL IN PLACE	% EXCAVATED	% STRUCTURE
	IF CONSTRUCTION	N HAS BEEN ABANDONED	
DATE ABANDONED	REASON ABANDONED		
PEMARKS OR ANY ADDITIONAL INF.	ORMATION WHICH MAY TEND TO SHOW GOOD FA	ITH IN THE PROSECUTION OF THE WORK	
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2. Enclosed c	opy of Chapter 4 fro	om the districts com	prehemsive plan for
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Conservati	on, water rights.		
3. Copy of Wa	ter system comprehen	sive	
			1. J.
T	d Cab	lb the December of Fig.	
	der of the above permit issued ith the terms of such permit a		
	ompleted the actual construc		
7 1 10 000	20	()	20.
eb 10,200		anus Na	us Manager
	4	Signature of Applicant	0
-C: OK,-	Send P.A.	P.O. Box 143	* = = = = = = = = = = = = = = = = = = =
		Present Address	
	f. Walsh,	Mallana	00550 0143
ECY 040-1-30		McKenna, WA. City, State, Zip Code	98558-0143
PTO 1 040-1-90	1	ord, blace, bip code	

File: Orig. & First Copy - Dept of logy Second Copy - Owner; Third Copy - Driller

(2a) STREET ADDRESS OF WELL (or nearest address) S 95TH AVE CT MCKENNA WA

WATER WELL REPORT State of Washington · Start Card No. A31560 Unique Well ID 1

Page 1 of

Water Right Permit No.

(1) OWNER: Name MCKENNA WATER DISTRICT (2) LOCATION OF WELL: County PIERCE

Address PO BOX 143 MCKENNA WA 98558

NW 1/4 NE 1/4 Sec 28 T 17 N R 2

(10) WELL LOG OF DECOMMISSIONING PROCEDURE DESCRIPTION (3) PROPOSED USE: ABANDONMENT (4) Type of work: ABANDONED Material From | To Method: ROTARY inches. ABANDON EXISTING HAND DUG WELL TO DOE (5) DIMENSIONS: Diameter of well ft. feet. Depth of completed well 0 REGS. WAC 173-160-381, PARAGRAPH 4 Drilled 0 DEPTH 20' (6) CONSTRUCTION DETAILS: STATIC FLUCTUCTES 4'-12' LINER 48' CEMENT TILES " Diam. from ft. to ft.| Casing instld: " Diam. from FILLED HOLE W/CHLORINATED SAND FROM ft. to ft. Welded Diam. from 20' TO 6.6' ft. to ft. | Liner FILLED REMAINDER OF HOLE W/CEMENT-5 Threaded \_ SACK MIX AS APPROVED BY RICH DICKERSON, TPCHD Perforations: Yes \_ No X ON SITE Type of perforator used in. | Size of perforations in. by perforations from ft. to in. perforations from ft. to in. perforations from ft. to in. Screens: Yes \_ No X Manufacturer's Name Model No Type ft. to Diam Slot size from ft. Diam Slot size from ft. to ft. | Gravel packed: Yes \_ No X Size of gravel Gravel placed from ft. | Surface seal: Yes \_ No X To what depth? ft. | Material used in seal Did any strata contain unusable water? Yes \_ No X Type of water? Depth of strata Method of sealing strata off (7) PUMP: Manufacturer's Name Type (8) WATER LEVELS: Surface elev above mean sea level ft. Static level ft. below top of well Date lbs. per sq. in. Artesian pressure Date Artesian pressure is controlled by (9) WELL TESTS: Pump test made? \_\_\_ By whom? Work Started 06/30/99 Completed 06/30/99 gal./min. with ft. drawdown after hrs Yield 0 gal./min. with ft. drawdown after hrs | WELL CONSTRUCTOR CERTIFICATION: gal./min. with ft. drawdown after hrs I constructed and/or accept responsibility for construction Yield 0 Recovery data: this well, and its compliance with all Washington well cons Time Wtr. Lvl. Time Wtr. Lvl. Wtr. Lvl. ruction standards. Materials used and the information report Time above are true to my best knowledge and belief. Name RICHARDSON WELL DRILLING Address P.O. Box 44427 Tacoma WA 98444 Date of test (signed) Doyslesson) gal/min with Bailer test 0 ft. drawdown after hrl Lic. No 1424 gal/min with stem set at ft. for (Well Driller) hrs | Artesian flow 0 gal/min Date | Contractor's Registration No. RICHAW\*3210B Date 07/28 Temperature of water | Based on form ECL 050-1-20 (2/93)\*\*f-1329- by Speed Systems C Was chemical analysis made? NO

File: Orig. & First Copy - Dept of Ecology Second Copy - Owner; Third Copy - Driller

WATER WELL REPORT State of Washington

Start Card No. A31561 Unique Well ID 2 Water Right Permit No.

(1) OWNER: Name MCKENNA WATER DISTRICT

Address PO BOX 143 MCKENNA WA 98558

Page 1 of NW 1/4 NE 1/4 Sec 28 T 17 N R 2

(2) LOCATION OF WELL: County PIERCE

gal/min Date

Was chemical analysis made? NO

Artesian flow 0

Temperature of water

(2a) STREET ADDRESS OF WELL (or nearest address) S 95TH AVE CT MCKENNA WA

(10) WELL LOG or DECOMMISSIONING PROCEDURE DESCRIPTION (3) PROPOSED USE: ABANDONMENT (4) Type of work: ABANDONED From | To ROTARY Method: (5) DIMENSIONS: Diameter of well 36 inches. ABANDON EXISTING HAND DUG WELL TO DOE feet. Depth of completed well 0 ft. REGS, WAC 173-160-381, PARAGRAPH 4 Drilled 0 DEPTH-20' (6) CONSTRUCTION DETAILS: STATIC-FLUCTUATES-4'-12' " Diam. from ft. LINER-36" STEEL CULVERT Casing instld: ft. to Welded \_ " Diam. from ft. FILLED HOLE TO 2.5 FROM GROUND LEVEL ft. to " Diam. from Liner ft. to ft. W/CHLORINATED SAND Threaded \_ FILLED REMAINDER OF HOLE W/CEMENT AS APPROVED BY RICH DICKERSON, TPCHD ON Perforations: Yes \_ No X SITE Type of perforator used Size of perforations in. by in. ft. to in. perforations from perforations from ft. to in. | perforations from ft. to in. Screens: Yes No X Manufacturer's Name Model No Type Diam Slot size from ft. to ft.| Slot size ft. to Diam from ft. Gravel packed: Yes \_ No X Size of gravel Gravel placed from ft. to ft. Surface seal: Yes \_ No X To what depth? Material used in seal Did any strata contain unusable water? Yes No X Type of water? Depth of strata Method of sealing strata off (7) PUMP: Manufacturer's Name H.P. 0 (8) WATER LEVELS: Surface elev above mean sea level ft. ft. below top of well Date Static level Artesian pressure lbs. per sq. in. Date Artesian pressure is controlled by (9) WELL TESTS: Pump test made? \_\_\_\_ By whom? Work Started 06/30/99 Completed 06/30/99 gal./min. with ft. drawdown after Yield 0 hrs Yield 0 gal./min. with ft. drawdown after hrs | WELL CONSTRUCTOR CERTIFICATION: gal./min. with hrs | I constructed and/or accept responsibility for construction Yield 0 ft. drawdown after Recovery data: this well, and its compliance with all Washington well const ruction standards. Materials used and the information report Wtr. Lvl. Time Wtr. Lvl. Time Wtr. Lvl. above are true to my best knowledge and belief. Name RICHARDSON WELL DRILLING Address P.O. 88x 44427 Tacoma WA 98444 Date of test (Signed) Bayolu bait gal/min with ft. drawdown after hr (Well Driller) gal/min with stem set at ft. for Airtest 0 hrs

Date 07/28/

Contractor's Registration No. RICHAW\*3210B | Based on form ECL 050-1-20 (2/93)\*\*f-1329- by Speed Systems Co

# CHAPTER 4 CONSERVATION, WATER RIGHTS, SYSTEM RELIABILITY, AND INTERTIES

#### 4.1 CONSERVATION PROGRAM DEVELOPMENT AND IMPLEMENTATION

#### 4.1.1 Required Measures For All Systems

The required measures for the conservation program are contained within the Guidelines and Requirements for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology, and Conservation Programs, March 1994 by Ecology and Health. The complete Water Conservation Plan for the McKenna Water District is included as Appendix F. The requirements for the Water Conservation Plan include water use data collection. The recommendation is to keep a minimum of five years of data. The District currently does not have the five years of data, due in part to records being destroyed in two separate flooding events. The District has no dedicated storage facility; instead records are kept by the Commissioners and General Manager in their own homes. There has been no comprehensive policy for record keeping in the past, and it has been difficult for the District to keep complete and organized data.

A water demand forecast is also a required of the Conservation Plan. The Conservation Plan requires that master meters are installed on all sources and that water conservation is promoted by the District.

#### 4.1.2 Conservation Program Outline

In addition to the items outlined in the preceding paragraph, the Conservation Plan recommends that the District begin collecting the data outlined in Section 2 of the Water Conservation Plan. When one year of data has been collected, an analysis should be completed to determine what further actions are needed, such as the level of conservation that is appropriate, if a leak detection program is needed, and if any additional data should be compiled.

#### 4.1.3 Conservation Programs

The Pierce County Coordinated Water System Plan and Regional Supplement, 1995 contains a general Water Conservation Program. That document has been reviewed and the actions appropriate to the District have been incorporated into the McKenna Water District Water Conservation Plan.

#### 4.2 SOURCE OF SUPPLY ANALYSIS

#### 4.2.1 Treatment

The District is providing disinfection with chlorine. The chlorine is introduced into the water supply near the wells with a feed pump. The feed pump is controlled to operate simultaneously with the well pumps. In addition, the District has received permission from Health to sequester iron and manganese through the addition of "Aqua-Mag."



#### 4.2.2 Artificial Recharge

The existing source wells for the District appear to be stable and sound sources of supply. There is no reason to suspect that the aquifers associated with these wells will cease to produce indefinitely. A system for monitoring the well levels will be established and maintained. Well level monitoring will be outlined in Chapter 6, Operations and Maintenance Program.

#### 4.2.3 Use of Reclaimed Water, Reuse, and Other Non-Potable Sources

The District does not currently utilize reclaimed water, water reuse, or non-potable sources. There is no water treatment facility in the District where this type of water would come from. Also, there is no large customer for this type of water. The majority of customers are residential, and the District's non-residential customers do not need large quantities of non-potable water. Until a potential customer for this type of water approaches the District, there are no plans to pursue this option.

#### 4.3 WATER RIGHT EVALUATION

#### 4.3.1 Permits, Certificates, Claims and Application

Appendix G contains copies of the existing system water right certificates. Table 4-1 summarizes the existing source water rights. As the tables show, the McKenna Water District currently has three water rights for a total of 165.5 acre-feet per year. The District previously had a Water Right Claim (# 002896) on file; however, this claim was relinquished as part of the Water Right agreement for the Whitewater Well (Well No. 4). The Report of Examination for the Whitewater Well, included in Appendix G, specifies that the claim will be relinquished at the time that the Whitewater Water Right is finalized.

#### 4.3.2 Existing Water Rights Status

The District's existing water rights are legal, sound certificates that are permanently assigned to the District as long as they remain in compliance with the Department of Ecology. In order to establish the new water right for the Whitewater Well (Well No. 4 [S03]), the District must comply with the provisions contained within the Report of Examination dated November 1, 1996 and as outlined below:

- The Whitewater well shall be completed and on line by November 1, 1997, and the water put to full use by November 1, 2002
- Once the Whitewater well is on line, the District must properly abandon Wells No. 1 (S02) and No. 2 and relinquish certificate G2-25434
- Ground Water Claim 002896 must be relinquished
- Water appropriated must be used for public water supply
- An access port must be installed and maintained on the Whitewater Well No. 4 (S03) per WAC 173-160-355.
- The minimum requirements established in the Guidelines and Requirements for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology, and Conservation Programs, most current edition, must be implemented.



Table 4-1:	Table 4-1: Existing Water Right(s) Status	. Right(s	) Status							
					Existing Water Rights	ter Rights	Existing Co	Existing Consumption (1)	Current Water Right Status (Excess/Deficiency)	Right Status iciency)
Permit, Certificate, or Claim#	Name of Rightholder or Claimant	Priority Date	Source Name/ Number	Primary or Supplemental	Maximum Instantaneous Flow Rate (Qi)	Maximum Annual Volume (Qa)	Maximum Instantaneous Flow Rate (Qi)	Maximum Annual Volume (Qa) Requested (2)	Maximum Instantaneous Flow Rate (Qi)	Maximum Annual Volume (Qa)
					GPM	AF/YR	GPM	AF/YR	GPM	AF/YEAR
Permits/Certificates	tes									
1 G2-25435C	McKenna Water District	12/5/79	1#	d						
2 G2-25435C	McKenna Water District	12/5/79	#2	d	130	98				
3 G2-25434C	McKenna Water District	12/5/79	#3	ď						
4 G2-27829P	McKenna Water District	8/4/90	#4 *	ď	140	79.5				
Claims										
- 6										
3										
4										
TOTAL	*******	* * * * * *	* * * * * * * * * * * * * * * * * * * *	*****	270	165.5	241.9	223.7	28.1	-58.2 (3)
					Existing Limits on Intertie Water Use	imits on ater Use	Existing (	Existing Consumption Through Intertie	Current Intertie Supply Status (Excess/Deficiency)	Supply Status ficiency)
Intertie Nat	Intertie Name/Identifier	Name c	of Purveyor Pr	Name of Purveyor Providing Water	Maximum Instantaneous Flow Rate (Qi)	Maximum Annual Volume (Qa)	Maximum Instantaneous Flow Rate (Oi)	Maximum Annual Volume (Oa)	Maximum Instantaneous Flow Rate (Oi)	Maximum Annual Volume (Oa)
1 2 3										
4										
TOTAL **	TOTAL ********	***	*******	*******						
Pending							Pending \	Pending Water Rights		
Water Right Application	Name on Permit	rmit	Date Submitted	Primary or Supplemental	Maximı Ra	Maximum Instantaneous Flow Rate (Qi) Requested	us Flow ted	Maxim (6	Maximum Annual Volume (Qa) Requested	me
1 0										
3										
4										
(1) Based upon 227 ERUs.	227 ERUs.									

353

Based upon 227 DRUS.

Based upon 800 gallons/ERUs/day + 10% non-revenue water

The District has never exceeded it's permitted water right.

With better record keeping an actual peak day value, which is expected to be significantly less then 800 gallons/ERU/day, will be utilized to revise this calculation.

Comprehensive Water Plan McKenna Water District

The required actions will either be a part of Well No.4 (S03) reconstruction, this Water Comprehensive Plan, or included in the Capital Improvement Program.

#### 4.3.3 Forecasted Water Rights Needs

Based solely on the existing water rights of 165.5 acre-feet per year, the District has an adequate source for 365 ERUs, using 405 gallons per ERU per day. The selection of 405 gallons/ERU is based on source water reading for the second half of 1998. This will provide adequate water until approximately 2009. The system currently serves 174 service connections for a total of 235 ERUs.

Table 4-2 outlines the water rights needed to supply the District for the next 20 years. As shown on Table 4-2, the McKenna Water District will require additional water rights. An Application for Water Rights will be filed. The maximum additional rights that can be applied for will provide rights for the next 20 years. The maximum water right based upon the population projections will be applied for at this time. There is no set time frame for processing of the water rights application by the Department of Ecology. Current estimates for the McKenna area are within the next 18 months; however, this time estimate could change.

#### 4.4 WATER SUPPLY RELIABILITY ANALYSIS

#### 4.4.1 Summary of System Reliability Efforts

The District is dependent upon electricity to power the well pumps and proposed booster pump station. The reservoir can supply the system without power for a limited amount of time; however, system pressures will begin to decrease as the reservoir level drops. Based on the available records, the District typically experiences two to three power outages per year ranging in duration of less than one hour to several days.

The District purchased a generator in the fall of 1998 to provide power during power outages. Well No. 3 (S01) has been modified to allow a generator to be quickly and safely hooked up. The booster station has been designed with a generator hookup as well.

In November 1998, the District contracted for the installation of a telemetry system to operate Well No. 3 (S01) and Well No. 4 (S03) based on levels in the reservoir. Once the telemetry system for Well No. 3 (S01) and Whitewater Well (Well No. 4 [S03]) is operational, system reliability will be enhanced, since there are two separate source locations. This has increased the District's reliability during localized power outages, and in the case of source contamination or depletion.

The District has many areas of the distribution system looped. Additional loops are included in the Capital Improvement Plan. System loops greatly enhance reliability in the case of main breaks or maintenance shutdowns.

#### 4.4.2 Water Shortage Response Planning

The Water Shortage Response Plan is included in Appendix K. District personnel must monitor the system frequently to be able to respond to developing situations promptly. Public notification should commence as soon as a potential water shortage is identified. Depending on the severity and duration of the anticipated shortage, water use curtailment can range from voluntary restrictions for lawn watering and car washing to mandatory curtailments on all non-essential uses. Updated notifications should be provided to residents and businesses as water supply conditions change.



McKenna Water District Comprehensive Water Plan

MWD001 January 1999

					Existing Water Rights	ter Rights	rorecasted wate (20-Year	(20-Year Demand) (1)	Forecasted Water Right Status (Excess/Deficiency)	r Right Statu
Permit, Certificate, or Claim #	Name of Rightholder or Claimant	Priority Date	Source Name/ Number	Primary or Supplemental	Maximum Instantaneous Flow Rate (Qi)	Maximum Annual Volume (Qa)	Maximum Instantaneous Flow Rate (Qi)	Maximum Annual Volume (Qa) Requested (2)	Maximum Instantaneous Flow Rate (Oi)	Maximum Annual
					GPM	AF/YR	GPM	AF/YR	GPM	AF/YEAR
Permits/Certificates	es									
1 G2-25435C	McKenna Water District	12/5/79	#1	Р						
2 G2-25435C	McKenna Water District	12/5/79	#2	Ч	130	98				
3 G2-25434C	McKenna Water District	12/5/79	#3	Ь						
4 G2-27829P	McKenna Water District	8/4/90	#4 *	Ь	140	79.5				
Claims										
1										
3 5										
4										
TOTAL	******	* * * * * * *	* * * * * * * * * * * * * * * * * * * *	*******	270	165.5	420.4	475.1	-150.4	-309.6
					Existing Limits on Intertie Water Use	mits on ater Use	Existing C Throug	Existing Consumption Through Intertie	Current Intertie Supply Status (Excess/Deficiency)	Supply Stat ficiency)
					Maximum	Maximum	Maximum	Movimum Annual	Maximum	Maximum
Intertie Nar	Intertie Name/Identifier	Name	of Purveyor P	Name of Purveyor Providing Water	Flow Rate (Qi)	Volume (Qa)	Flow Rate (Qi)	Volume (Qa)	Flow Rate (Qi)	Volume (Qa)
3										
TOTAL **	TOTAL *******	* * *	**********	********						
Pending							Pending V	Pending Water Rights		
Water Right Application	Name on Permit	ermit	Date Submitted	Primary or Supplemental	Maximu Ra	Maximum Instantaneous Flow Rate (Qi) Requested	us Flow ted	Maxim ((	Maximum Annual Volume (Qa) Requested	me
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2										
2 4										

McKenna Water District Comprehensive Water Plan



#### 4.4.3 Monitoring Well Levels

Well levels shall be monitored and recorded on a daily basis. These records should be reviewed by the Board of Commissioners monthly. If well levels begin to drop, it may be necessary to contact a technical professional to aid in determining the cause and possible solutions and/or begin looking into potential new sources.

#### 4.5 INTERTIES

Water system interties are a valuable asset to a water system. An intertie provides an additional source for emergency needs, redundancy in the event of power failure, and an alternative source in the event of well contamination.

The McKenna Water District currently has no interties. The District has been self-sufficient in supplying its customer's water demands.

The closest water systems to the McKenna Water District are the Riverview Water District, City of Yelm, and City of Roy. The Riverview Water District is small, with 30 service connections, a pressure tank, and one well. The City of Yelm and the City of Roy water systems are a considerable distance from the water system service area. Creating an intertie would be a considerable expense to all of the systems involved. At this time, the District has no intentions of pursuing an intertie agreement. If the District were approached by another system, however, it would be open to considering an intertie.

#### 4.6 IDENTIFICATION OF SYSTEM IMPROVEMENTS

The system improvements needed to address the deficiencies cited in this Chapter are:

- Apply for additional water rights to supply the system for the next 20 years
- Complete the telemetry system

The District also needs to expand its record keeping to include daily reading of the well production meters. This will enable the District to identify peak day usage, which would then allow the District to use actual peak day demand in calculating source and storage requirements. It is anticipated that actual peak day usage will be significantly lower than the 800 gallon per connection per day that was used for the source requirement calculations. Accurate record keeping could help the District serve additional customers prior to obtaining additional water rights.





#### DEPARTMENT OF HEALTH

1511 Third Ave., Suite 719 • Seattle, Washington 98101-1632

March 25, 1999

BOARD OF COMMISSIONERS MCKENNA WATER DISTRICT PO BOX 143 MCKENNA WA 98558

Subject:

McKenna Water District

Pierce County Water System Plan Submittal # 98-0608

#### Dear Commissioners:

The McKenna Water District water system plan, received in this office on June 15, 1998 with revisions submitted on February 11, 1999 has been reviewed and in accordance with the provisions of WAC 246-290-100, is hereby APPROVED.

Approval of this plan is granted through March 25, 2005 and is valid as it relates to current standards outlined in WAC 246-290, revised July 1994. Future revisions in the rules may be more stringent and require facility modifications or corrective action. Approval of the update of this water system plan is required on or before March 25, 2005.

This plan demonstrates how the McKenna Water District will maintain financial viability.

This water system plan is consistent with the Public Water System Coordination Act (70.116 RCW) and the Pierce County Coordinated Water System Plan.

Standard Construction Specifications for distribution main extensions have been approved as part of this water system plan. With this approval and consistent with WAC 246-290-110(2)(e) and -120(2)(e), the McKenna Water District is authorized to proceed with the installation of distribution main extensions provided that the purveyor documents to the department:

1. That a professional engineer, registered in Washington, certified construction in accordance with WAC 246-290-040(2) and that the construction complies with the approved standard construction specifications (i.e., submits enclosed DOH form, Construction Report for Public Water System Projects).



McKenna Water District March 24, 1999 Page 2

2. Of the pressure test results, disinfection procedures used and tests performed, and water quality sample results, obtained prior to placing the distribution pipe into service (see enclosed DOH form).

The following elements have also been approved as a part of the McKenna Water District Water System Plan:

A Cross Connection Control Program in accordance with WAC 246-290-490

A Wellhead Protection Plan and a Watershed Control Program in accordance with WAC 246-290-135

A Water Quality Monitoring element including a Coliform Monitoring Program in accordance with WAC 246-290-300

Thank you for your cooperation. If you have any questions or wish to check our records, please contact Richard Rodriguez at (206) 587-5619.

Sincerely,

Regional Planner

Regional Engineer

cc: Susan Clark, Pierce Co. Dept. of Public Works

Gary Porter, TPCHD

James J. Morgan, PE, Cosmopolitan Engineering Group

Carol Stuckey, DOH Shasta Guinn, DOH





#### DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

June 3, 1999

McKenna Water District PO Box 143 McKenna WA 98558-0143

Dear Sir or Madame:

Re:

Ground Water Permit No. G2-27829

In reviewing your permit, we find you have not submitted the completion of construction form.

If the work has been completed on this project, please complete the enclosed form. If not, we must update your file. Please send us a letter requesting an extension of time to extend the completion of construction date from November 1, 1997, through November 1, 2000. Please submit the statutory extension fee of \$5.00 per year, for a total of \$15.00 payable to the Department of Ecology.

By statute, projects under permit must be pursued with diligence, and good cause for granting an extension must be shown. A report of progress made during the past year must be included with your request for extension. If you are no longer interested in the permit, please sign the statement below and return to this office.

I am no longer interested in processing the Ground Water Permit No. G2-27829 or obtaining a water right and I hereby agree to it being cancelled.

I understand that after the effective date of cancellation, any withdrawal of ground water exceeding 5000 gallons a day and irrigation of more than one-half acre is a violation in accordance with Chapters 90.03 and 90.44 RCW and is subject to enforcement action. Please sign below if you would like to cancel this water right.

43

Signature

Sincerely,

Sheri Carroll Water Resources

Sherr Carroll

SC:th(8AG)





#### DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (206) 407-6300

I certify that I mailed a copy of this document to the persons and addresses listed thereon, postage prepaid, in a receptacle for United

States mail in Lacey, Washington on

January 13, 1997

McKenna Water District PO Box 143 McKenna, Washington 98558-0143

Dear Sir or Madame:

Re: Ground Water Permit No. G 2-27829

Enclosed is Permit No. G 2-27829. Our information indicates that you have begun construction of your project. We are enclosing a Notice of Completion which must be filed when you have finished the work.

If you cannot complete your project by November 1, 1997, you must contact this office.

This order may be appealed. Your appeal must be filed with the Pollution Control Hearings Board, PO Box 40903, Olympia, WA 98504-0903 within thirty (30) days of the date this decision was mailed. At the same time your appeal must be sent to the Department of Ecology c/o Enforcement Officer, PO Box 47600, Olympia, WA 98504-7600. Your appeal alone will not stay the effectiveness of the Order. These procedures are consistent with Chapter 43.21B RCW.

a Carlo

Please read the enclosed information sheet, as well as both sides of your permit.

Sincerely,

Gale Blomstrom

Shorelands & Water Resources Supervisor

Southwest Regional Office

gace Blomstrom

GB:th(permit2) Enclosures S